

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-50. (Canceled)

51. (New) An apparatus for use with an electrophysiology device that includes a coagulation element for ablating tissue, the apparatus comprising:

a main body;

a suction region associated with the main body;

a non-coagulative stimulation element on the main body;

a stimulation energy sensing element on the main body, the suction region being between the non-coagulative stimulation element and the stimulation energy sensing element; and

a connector located between the stimulation element and the stimulation energy sensing element, the connector being configured to secure the coagulation element of the electrophysiology device within the main body adjacent to the suction region.

52. (New) An apparatus as claimed in claim 51, wherein the suction region comprises a plurality of suction regions and the stimulation element comprises a plurality of stimulation elements.

53. (New) An apparatus as claimed in claim 51, wherein the stimulation element comprises a stimulation electrode.

54. (New) An apparatus as claimed in claim 51, wherein the stimulation element comprises a stimulation electrode pair.

55. (New) An apparatus as claimed in claim 51, wherein the stimulation energy sensing element comprises a stimulation energy sensing electrode.

56. (New) An apparatus as claimed in claim 51, wherein the stimulation energy sensing element comprises a stimulation energy sensing electrode pair.

57. (New) An apparatus as claimed in claim 51, wherein the suction region comprises first and second suction ports and the connector is positioned between the first and second suction ports.

58. (New) An apparatus as claimed in claim 57, wherein
the stimulation energy sensing element is adjacent to the first suction port; and
the stimulation element is adjacent to the second suction port.

59. (New) An apparatus as claimed in claim 51, wherein the connector is configured to removably secure the coagulation element of the electrophysiology device adjacent to the suction region.

60. (New) A system for use with an electrophysiology device that includes a coagulation element for ablating tissue, the system comprising:

a suction source; and

an apparatus, adapted to be operably connected to the suction source, including a main body, a suction region associated with the main body, a non-coagulative stimulation element on the main body, a stimulation energy sensing element on the main body, the suction region being between the non-coagulative stimulation element and the stimulation energy sensing element, and a connector, located between the stimulation element and the stimulation energy sensing element, the connector being configured to secure the coagulation element of the electrophysiology device within the main body adjacent to the suction region.

61. (New) A system as claimed in claim 60, wherein the suction region comprises a plurality of suction regions and the stimulation element comprises a plurality of stimulation elements.

62. (New) A system as claimed in claim 60, wherein the stimulation element comprises a stimulation electrode.

63. (New) A system as claimed in claim 60, wherein the stimulation element comprises a stimulation electrode pair.
64. (New) A system as claimed in claim 60, wherein the stimulation energy sensing element comprises a stimulation energy sensing electrode.
65. (New) A system as claimed in claim 60, wherein the stimulation energy sensing element comprises a stimulation energy sensing electrode pair.
66. (New) A system as claimed in claim 60, wherein the suction region comprises first and second suction ports and the connector is positioned between the first and second suction ports.
67. (New) A system as claimed in claim 66, wherein
the stimulation energy sensing element is adjacent to the first suction port; and
the stimulation element is adjacent to the second suction port.
68. (New) A system as claimed in claim 60, wherein the connector is configured to removably secure the coagulation element of the electrophysiology device adjacent to the suction region.
69. (New) A system, comprising:
an electrophysiology device including a support structure and a coagulation element for ablating tissue, the coagulation element being carried on the support structure; and
a stimulation apparatus including a main body, a suction region associated with the main body, a non-coagulative stimulation element on the main body, a stimulation energy sensing element on the main body, the suction region being between the non-coagulative stimulation element and the stimulation sensing element, and a connector located between the stimulation element and the stimulation energy sensing element, the connector being configured to secure the coagulation element of the electrophysiology device within the main body adjacent to the suction region.

70. (New) A system as claimed in claim 69, wherein the electrophysiological device support structure defines a cross-sectional size and shape and the connector defines a corresponding cross-sectional size and shape.
71. (New) A system as claimed in claim 69, further comprising:
a suction source adapted to be operably connected to the stimulation apparatus.
72. (New) A system as claimed in claim 69, further comprising:
a stimulation energy source adapted to be operably connected to the stimulation apparatus.
73. (New) A system as claimed in claim 69, further comprising:
a coagulation energy source adapted to be operably connected to the electrophysiology device.
74. (New) A system as claimed in claim 69, wherein the electrophysiological device includes a plurality of spaced coagulation elements, the stimulation apparatus includes a plurality of spaced stimulation elements, and the electrophysiological device and stimulation apparatus are respectively configured such that the coagulation elements will be adjacent to respective stimulation elements when the electrophysiology device is connected to the stimulation apparatus.
75. (New) A system as claimed in claim 69, wherein the stimulation element comprises a stimulation electrode.
76. (New) A system as claimed in claim 69, wherein the stimulation element comprises a stimulation electrode pair.
77. (New) A system as claimed in claim 69, wherein the stimulation energy sensing element comprises a stimulation energy sensing electrode.

78. (New) A system as claimed in claim 69, wherein the stimulation energy sensing element comprises a stimulation energy sensing electrode pair.
79. (New) A system as claimed in claim 69, further comprising:
an electrophysiology recording apparatus adapted to be operably connected to the stimulation energy sensing element on the stimulation apparatus.
80. (New) A system as claimed in claim 69, wherein the connector is configured to removably secure the coagulation element of the electrophysiology device adjacent to the suction region.
81. (New) An apparatus as claimed in claim 51, wherein the stimulation element and the stimulation energy sensing element are each too small to form a transmural myocardial lesion.
82. (New) A system as claimed in claim 60, wherein the stimulation element and the stimulation energy sensing element are each too small to form a transmural myocardial lesion.
83. (New) A system as claimed in claim 69, wherein the stimulation element and the stimulation energy sensing element are each too small to form a transmural myocardial lesion.

84. (New) An apparatus for use with an electrophysiology device that includes a coagulation element for ablating tissue, the apparatus comprising:

- a main body defining a longitudinal axis;

- a suction region associated with the main body;

- a connector configured to secure the coagulation element of the electrophysiology device within the main body adjacent to the suction region;

- non-coagulative means, carried by the main body, for stimulating tissue that is adjacent to the main body and on one side of the longitudinal axis; and

- means, carried by the main body, for sensing stimulation energy in tissue that is adjacent to the main body and on the other side of the longitudinal axis, the suction region being between the non-coagulative means for stimulating tissue and the means for sensing stimulation energy.